



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

January 6, 2010

**LICENSEE:** ENTERGY OPERATIONS, INC.

**FACILITY:** ARKANSAS NUCLEAR ONE, UNIT 1

**SUBJECT:** SUMMARY OF DECEMBER 15, 2009, MEETING WITH ENTERGY OPERATIONS, INC., ON ARKANSAS NUCLEAR ONE, UNIT 1, STEAM GENERATOR ISSUES

On December 15, 2009, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Entergy Operations, Inc. (Entergy, the licensee), at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss results of the Arkansas Nuclear One, Unit 1 (ANO-1), steam generator inspection during the past outages and address the issues related to bowed tie rods and tube support plate wear. A list of attendees is enclosed.

Proprietary information was discussed during the closed portion of the meeting. Prior to the meeting, the licensee presented both proprietary and redacted (non-proprietary) versions of the handouts. The proprietary version is contained in the Agencywide Documents Access and Management System (ADAMS) Accession No. ML093500503 (not publicly available). The non-proprietary version handout is contained in ADAMS Accession No. ML093500565.

The licensee's opening remarks included the description of the enhanced once-through steam generator (EOTSG) and the scope and results of the spring 2007 (1R20) and fall 2008 (1R21) refueling outages including the location and extent of the bowed tie rods and tube support plate wear. Areva, the supplier of the EOTSGs at ANO-1, presented information during the proprietary portion of the meeting. This included cause and mechanics of the tie rod bowing, observed and anticipated values, fatigue considerations and evaluation, and limits. The licensee concluded the presentation with a discussion of the acceptance criteria for the future inspections and inspection interval.

The NRC staff queried the licensee and its vendor about certain technical aspects of the presentation, and responses were provided.

Members of the public were not in attendance. One Public Meeting Feedback form was received and it contained no comments.

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Please direct any inquiries to me at 301-415-1480 or [kaly.kalyanam@nrc.gov](mailto:kaly.kalyanam@nrc.gov).

A handwritten signature in black ink, appearing to read "Kaly Kalyanam", with a horizontal line underneath the name.

N. Kaly Kalyanam, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-313

Enclosure:  
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES

DECEMBER 15, 2009, MEETING WITH ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT 1

STEAM GENERATOR INSPECTION RESULTS

<u>Name</u>	<u>Affiliation</u>
J. McCoy	Entergy
D. Meatheany	Entergy
F. Philpott	Entergy
J. Begley	Areva
D. Lang	Areva
J. Brown	Areva
R. Taylor	NRC/NRR/DCI
K. Karwoski	NRC/NRR/DCI
E. Murphy	NRC/NRR/DCI
A. Johnson	NRC/NRR/DCI
C. Harris	NRR/RES
W. Schaup	Region IV/DRP/Branch E
N. Kalyanam	NRR/DORL/LPL4

Enclosure

Please direct any inquiries to me at 301-415-1480 or [kaly.kalyanam@nrc.gov](mailto:kaly.kalyanam@nrc.gov).

/RA/

N. Kaly Kalyanam, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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WSchaup, RIV  
CHarris, RES/DE/CMB  
E. Murphy, NRR/DCI/CSGB  
K. Karwoski, NRR/DCI  
A. Johnson, NRR/DCI/CSGB  
L. Trocine, EDO RIV  
J. Clark, RIV  
A. Sanchez, SRI, ANO

**ADAMS Accession Nos.** Meeting Notice ML092920405, Meeting Summary ML093520058, Handouts ML093500565

OFFICE	DORL/LPL4/PM	DORL/LPL4/LA	DCI/CSGB	DORL/LPL4/BC	DORL/LPL4/PM
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DATE	12/22/09	12/22/09	1/4/10	1/6/10	1/6/10

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